

Editor-In-Chief Lara Phelps, USEPA

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# The Institute Review

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Third Quarter 2012

## The TNI/NEMC Washington DC Forum

By Keith Chapman, TNI Small Laboratory Advocate

The 2012 Environmental Measurement Symposium took place August 6 – 9 in Washington DC and was attended by over 500 participants. The National Environmental Monitoring Conference (NEMC) portion of the program contained over 150 technical presentations and can be downloaded at <a href="http://www.nemc.us/meeting/2012/nemc-program.php">http://www.nemc.us/meeting/2012/nemc-program.php</a>. Presentations from the Forum on Laboratory Accreditation (Forum) side of the program are posted on the TNI website at <a href="http://www.nelac-institute.org/meetings-prev.php">http://www.nelac-institute.org/meetings-prev.php</a>.

Keynote presentations started off each day, in addition to a general session for everyone on Wednesday. To mention just a few, Tuesday's keynote presentation highlighting **Sustainability** began with a Lord Kelvin quotation that "To Measure is to Know" and discussed just how it is that sustainability can be measured...and therefore allow you to know if the environment is, in fact, sustainable or not. The Wednesday morning plenary session's theme was "Collaboration" and Michael Shapiro's presentation on "Collaborative Opportunities for Meeting Environmental Measurement and Monitoring Needs" is well worth reading as "collaboration" and "harmonization" were recurring themes throughout the entire program. Also, don't overlook the Monday keynote presentation on the "Chemistry of Red Wine."

The U.S. Environmental Protection Agency's (EPA's) Environmental Laboratory Advisory Board (ELAB) session started off the week and brought up a number of ideas that merit some thought: method harmonization; replacing the method detection limit procedure; and the state of laboratory accreditation. ELAB published a sort of white paper on the **Status of Lab Accreditation** that highlighted the difficulties and problems with current programs, and paid small attention to the upside of lab accreditation. There was a section on Small Lab Participation that states "All of the respondents thought that small laboratories are overwhelmed. These laboratories cannot meet the requirements and/or afford to implement the program because of time and/or resources." It also says "The TNI's (sic) Small Lab Advocacy Group (SLAG) has made giant strides in educating the small laboratory community and providing support in implementing the standards." The complete document it can be found at <a href="http://www.epa.gov/elab/pdfs/ELAB\_Summary\_State\_National\_Accreditation.pdf">http://www.epa.gov/elab/pdfs/ELAB\_Summary\_State\_National\_Accreditation.pdf</a>.

Another noteworthy NEMC session presentation was entitled "Standard Methods and QA/QC Updates for Drinking Water and Wastewater – the Balancing Act of Regulatory Constraints." This talk by Andrew Eaton explained the current relationship between EPA's mandated Quality Control requirements in its recent Method Update Rule (MUR) and the recent editions of Standard Methods. It is important to note that Standard Methods has since published a Joint Editorial Board policy statement on using Standard Methods to meet these new quality control criteria on its website (<a href="http://www.standardmethods.org/">http://www.standardmethods.org/</a>), as well as complete lists of Clean Water Act and Safe Drinking Water Act method approvals.

All of the TNI Committees met throughout the week and, as noted above, presentations, minutes, and products from those sessions are available on the TNI website. A few sessions of note...

The National Environmental Field Activities Program (NEFAP) for Field Sampling and Measurement Organizations (FSMOs)... is now available through several third-party Accrediting Bodies (ABs), not any State ABs, for an organization that wishes to be accredited for field sampling and testing. If interested, look on the TNI website (<a href="http://nelac-institute.org/howto-ab-nefap.php">http://nelac-institute.org/howto-ab-nefap.php</a>) or contact Marlene Moore at <a href="mmoore@advancedsys.com">mmoore@advancedsys.com</a>.

The Quality Systems Expert Committee (QSEC)... discussed responses to the Voting Draft Standard (VDS) (i.e., Modules 2 – 5, but not 6 or 7). Two new committees were tentatively formed during the conference: a Microbiology Expert Committee chaired by Robin Cook and a Radiation Expert Committee chaired by Bob Shannon. Consensus Standards Development

## The TNI/NEMC Washington DC Forum (cont.)

Executive Committee (CSDEC) approval of these new committees has begun and, once finalized, Board approval will be requested.

The Proficiency Testing Expert Committee (PTEC)... received many comments on Volume 1 and Volume 2 working draft standards (WDSs); therefore, an extensive rewrite will be needed. The PTEC plans to then begin Volume 3, which will likely be based on ISO/IEC 17043. All proficiency testing (PT) vendors are already accredited to 17043, but are using procedures for making and scoring the PTs based on old EPA requirements that allow no change, but all want changes able to be made.

The Consensus Standards Development Executive Committee (CSDEC)... The Environmental Measurement Methods Expert Committee (EMMEC) will be renamed the Chemistry Committee. It, and the Microbiology and Radiation committees, will have responsibility for defined parts of what was formerly handled by Quality Systems.

The National Environmental Laboratory Accreditation Program Accreditation Council (NELAP AC)... Ongoing updates show that evaluations of NELAP ABs for renewal of recognition are proceeding on schedule, although progress in AB implementation of the 2009 Standard is still not complete. Some progress has been made on commitments from the Sarasota meeting. Discussion of coordinating and harmonizing Fields of Accreditation occurred, but is complicated by individual state restrictions. Other major efforts have been the formation of a "quick response subcommittee" to systematically address the backlogged SIRs and working with the IT committee to address method code changes required by EPA's MUR. An extensive discussion about incorporating nongovernmental ABs (NGABs) helped all parties better understand some aspects of what has proven to be a highly emotional issue. Steve Stubbs of Texas, Vice Chair of the AC, retired at the end of August.

The Laboratory Accreditation Systems Executive Committee (LASEC)... Out of 206 SIRs submitted, 110 have been closed, with 90 outstanding. In reviewing the process, it appears that the Expert Committee interpretations are not being reviewed by LAS EC per the Standard Operating Procedure (SOP); this will occur going forward.

The Accreditation Body Task Force Two (ABTF II)... met to present a report of activities to date. Then, in another session, the ABTF II and the NELAP AC met for a panel discussion with five NGABs (i.e., Perry Johnson, A2LA, LAB, ACLASS and AIHA). Both meetings involved lively input from both task force members and meeting attendees. The big issue with approval of NGABs is whether the approval body could be the NELAP AC, a combination of NELAP and NEFAP, or something else. The ABTF II asked NELAP ABs if they would be able to approve a NGAB as meeting the TNI Standard or to become a member of the NELAP AC. Five of the twelve ACs who responded said they would not be able to do so. This position is articulated in a recent APHL Position Statement. Approval as a TNI AB and mutual recognition are currently part of the same process. We need to explore whether the answers would change if they were separated.

**The Corrective Action Workgroup...** This group was chartered by the Board in 2011 to improve the process of standards development. The workgroup identified four recommendations:

- Examine the process from comments on the VDS to the final Standard, and add an additional step of feedback to commenters for clarity and to determine whether the "fix" addressed the comment.
- 2. Form an "editorial board" to review Standards for consistency.
- 3. Examine the AC and LAS procedures to find ways for earlier review and input from these groups between the WDS and VDS, at a minimum.
- 4. Develop better mechanisms for tracking "parking lot" issues.



Using the TNI Standard for Essential Quality Assurance and Quality Control for Wastewater Analyses

On May 18, 2012, EPA published a final rule that approved new methods, or changes to existing methods, that affects over 100 EPA methods, Standard Methods, ASTM methods, and other test procedures in Part 136 of Title 40 of the Code of Federal Regulations (CFR). The rule also contains a number of clarifications relating to approved methods, sample preservation and holding times, and method modifications.

Among the more significant changes is a new section 136.7 that would require "essential" quality control activities. The NELAC Institute (TNI) has developed a consensus standard, Management and Technical Requirements for Laboratories Performing Environmental Analysis, which is used in TNI's National Environmental Laboratory Accreditation Program (NELAP).

Even for laboratories that are not seeking accreditation, but that wish to incorporate the 12 essential elements specified in the new section 136.7 into their operation, this standard can be used effectively. TNI has published a document to provide guidance on how to use the TNI Standard for that purpose. This document is available on the TNI website under News.



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## 2013 Forum on Laboratory Accreditation

By Jerry Parr, TNI

Registration is open for the 2013 Forum on Laboratory Accreditation to be held at the Grand Hyatt in Denver, CO from January 14 – 17, 2013. The Forum will feature open public meetings of all TNI committees to allow quality professionals, chemists, analysts, microbiologists, engineers, and managers from federal and state agencies; commercial, municipal, state, and federal laboratories; and many others who are actively involved and interested in accreditation issues to review what has been done and participate in the efforts to establish a national environmental accreditation program.

The 2013 Denver Forum will include:

- Meetings of all TNI committees;
- ♦ Discussion of the new consensus standards in development for quality systems, detection and quantitation, instrument calibration, proficiency testing, and field activities;
- An Assessment Forum with topics on improving the audit process and standard interpretations;
- ◆ A report from the Consistency Improvement Task Force;
- ♦ A meeting of EPA's Environmental Laboratory Advisory Board (ELAB); and
- A general session with updates about TNI programs.

For more information, go to the 2013 conference website at <a href="http://www.nelac-institute.org/">http://www.nelac-institute.org/</a> meetings.php.

## **Revised Quality Systems Expert Committee Structure**

By Ken Jackson, TNI

The development of future Environmental Sector Quality System (QS) Standard has been redistributed through four expert committees. The six QS modules of the laboratory volume VI were previously the responsibility of the twelve-member Quality Systems Expert Committee, but the magnitude and diversity of the QS Standard has now become so large it was decided it is too big a task for one committee, even with subcommittees. The revised committee structure and responsibilities are shown in the table below.

Expert Committee	Responsibilities
Quality Systems	V1M2 (QS General Requirements), with subcommittees for Asbestos (V1M3) and Toxicity (V1M7)
Chemistry	V1M4 (QS Chemistry). This committee is the current EMMEC.
Microbiology	V1M5 (QS Microbiology)
Radiochemistry	V1M6 (QS Radiochemistry)

Module 2 (V1M2) is the foundation on which the entire QS Standard is built. This encompasses ISO 17025 with additional requirements specific to environmental testing, and it will remain the responsibility of the Quality Systems Expert Committee. The Environmental Measurement Methods Expert Committee (EMMEC) is developing a revised calibration, detection, and quantitation Standard to go into Module 4 (Chemistry). This committee will expand its role to be responsible for the all of Module 4 and it has been appropriately re-named the Chemistry Expert Committee. Two new committees, the Microbiology Expert Committee and the Radiochemistry Expert Committee are being formed to assume responsibility for Modules 5 and 6, respectively. The two remaining specialist areas of asbestos and toxicity are not yet big enough to merit separate expert committees, and they will remain the responsibility of the Quality Systems Expert Committee with appropriate subcommittees.

Formation of the Radiochemistry Expert Committee is already well under way. A group of fifteen people, based largely on the membership of the previous QS radiochemistry subcommittee, has held several preliminary meetings to develop a draft charter and to begin work on Module 6. For the Microbiology Expert Committee, a balanced group is still being assembled and anyone interested in becoming a Committee Member should contact the author (<a href="mailto:ken.jackson@nelac-institute.org">ken.jackson@nelac-institute.org</a>).



# Upcoming Meetings of Interest to Members

2013 Forum on Laboratory Accreditations January 14—17, 2013 Denver, CO

http://www.nelac-institute.org/ meetings.php

If you know of any upcoming meetings of interest to environmental laboratory professionals, please contact Jerry Parr at <u>jerry.parr@nelac-institute.org</u>.

# TNI Small Laboratory Song

Keith Chapman, formerly with the City of Salem, OR, and the TNI Small Laboratory advocate, has written the Small Laboratory Song. After his premier performance at the Advocacy Committee meeting in Washington, DC, the committee requested Keith record the song. You can view the song on the TNI website at: <a href="http://nelac-institute.org/small-lab-song.mpg">http://nelac-institute.org/small-lab-song.mpg</a>.



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# 2013 Forum on Laboratory Accreditation Preliminary Schedule

## Monday, January 14

8:00 — 10:00 ELAB

8:00 — 10:00 Introduction to TNI Programs and Services

## 10:30 — 12:00 General Session

- Consensus Standards Development Program (CSDP) Report
- National Environmental Field Activities Program (NEFAP) Report
- National Environmental Laboratory Accreditation Program (NELAP) Report
- ♦ Proficiency Testing (PT) Program Report
- ♦ Report on TNI Administrative Activities

## 1:30 — 5:00 Concurrent Sessions

- Laboratory Quality Systems Expert Committee
- National Environmental Field Activities Program (NEFAP) Executive Committee
- Proficiency Testing Program Executive Committee

## Tuesday, January 15

## 8:00 — 12:00 Concurrent Sessions

- Field Activities Committee
- Laboratory Accreditation Body Expert Committee
- ♦ Laboratory Proficiency Testing Expert Committee

## 12:00 — 1:30 Keynote Speaker

♦ Final Report of the Consistency Improvement Task Force

## 1:00 — 4:00 Concurrent Sessions

- Technical Assistance Committee
- National Environmental Laboratory Accreditation Program (NELAP) Accreditation Council
- Stationary Source Audit Sample (SSAS) Committee

## Wednesday, January 16

## 8:00 — 12:00 Concurrent Sessions

- ♦ Assessment Forum
- Laboratory Accreditation System Executive Committee
- Chemistry Expert Committee
- Microbiology Expert Committee

## 1:30 — 5:00 Concurrent Sessions

- ♦ Assessment Forum (cont.)
- Advocacy Committee
- ♦ Chemistry Expert Committee (cont.)
- ♦ Radiochemistry Expert Committee

## Thursday, January 17

## 8:00 — 10:30 Concurrent Sessions

- Mentor Session
- Accreditation Body Task Force
- ♦ Consensus Standards Development Program Executive Committee

## 11:00 — 12:00 General Session

Summary of the 2013 Denver Forum



## Denver Assessment Forum

TNI's Assessment Forum is structured to provide an opportunity for laboratories and laboratory assessors to share information on how to improve the laboratory assessment process. This year's Assessment Forum will focus on the laboratory audit process and standard interpretations.

## Denver Mentor Session

TNI's Technical Assistance
Committee (TAC) hosts a Mentor
Session at each of TNI's semiannual meetings to share
information on topics of interest
to laboratories and Accreditation
Bodies. The Denver Mentor
Session will be focused on how to
use the TNI Standard to comply
with the QC elements of EPA's
2012 Method Update Rule.



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# **Call for Papers**



# "Protecting Human Health through Environmental Measurement & Monitoring"

The 29<sup>th</sup> Annual National Environmental Monitoring Conference (NEMC) San Antonio, Texas August 5 — 9 2013

Organized jointly by the U.S. Environmental Protection Agency (EPA) and The NELAC Institute (TNI), the 2013 Environmental Measurement Symposium is a combined meeting of the National Environmental Monitoring Conference (NEMC) and the Forum on Laboratory Accreditation. It is the largest conference focused on environmental measurements in North America. The NEMC Steering Committee is inviting abstracts for oral or poster presentations in these specific topic areas:

- Collaborative Efforts to Improve Environmental Monitoring
- Academic Research Topics in Environmental Measurement and Monitoring
- ♦ Laboratory Accreditation
- Topics in Drinking Water
- Analysis of Metallic Species and Organometallics
- EPA Approval to Innovative Approaches to Monitoring
- Field Measurements, Sensors, and In-Situ Monitoring
- Operational and Advocacy Issues Impacting the Environmental Laboratory Industry

- ♦ Current Topics in Microbiology
- ♦ Air Methods/Monitoring
- Contaminated Sediments
- ♦ Topics in Shale Gas Exploration
- ♦ Forensic Chemistry
- Modeling, Mapping, and Geospatial Tools
- Advances in Sample Preparation and Cleanup
- Legal Defensibility of Data
- Indoor Air Quality
- Product Emission Testing
- Food Safety Measurements
- Fence Line Monitoring
- Data Management

Please provide your abstract by **February 11, 2013**. Abstracts received after the deadline are not guaranteed to be reviewed due to the number of available time slots and the high number of quality and timely submissions received. More information and submission instructions are on the NEMC website at <a href="http://www.nemc.us">http://www.nemc.us</a>.

The NEMC Steering Committee is offering awards this year to both students and academic professionals. Details regarding these opportunities are available on the NEMC website under Technical Program – Academic Call for Papers.



## Update on Training Courses, Webinars and Webcasts

In 2012, TNI launched its new Educational Delivery System (EDS), a comprehensive training system that utilizes various face-to-face and web based types of Training. To date, TNI has supported twenty-six training events that have been attended by over 900 individuals. One additional training course and two webinars are scheduled for later this year. In addition, four webcasts are now available for you to download at any time to have a training activity at your location.

#### TRAINING COURSE:

## Basic Assessor Training Kansas City; November 27, 2012

This course provides examples and a basic understanding of the assessment processes within the National Environmental Laboratory Accreditation Program (NELAP) framework. The basic principles for assessing environmental laboratories are presented. A summary of the 2009 TNI Environmental Laboratory Standard and practical examples for implementation of assessment techniques are an integral portion of this training course. <a href="http://www.regonline.com/asikansas">http://www.regonline.com/asikansas</a>.



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# Next Steps for Accreditation Body Task Force II: Non-Governmental Accreditation Bodies

By Carol Batterton, TNI

In their initial report to the TNI Board, the Accreditation Body Task Force (ABTF) found that allowing third-party non-governmental accreditation bodies (NGABs) to accredit to the TNI Standard is a viable option to potentially alleviate workload problems for NELAP ABs, with no insurmountable impediments to its use. The TNI Board agreed with the ABTF and voted to form a new task force (i.e., ABTF II) to develop a plan of action for allowing NGABs to grant NELAP accreditations.

At the Environmental Measurement Symposium, the ABTF II reported that they had concluded an evaluation process similar to the current NELAP/NEFAP Evaluation SOP can be designed to approve NGABs as meeting requirements of the TNI Standard to accredit laboratories. However, a major question remains as to what body will provide oversight and approval for the NGABs and how the NGABs will be incorporated into the current system. Not all state NELAP ABs can have mutual recognition with NGABs. In a survey conducted by the ABTF II, in which eleven of fifteen NELAP ABs responded, six states have indicated they cannot allow an NGAB to be a member of the NELAP AC. Six states also responded they would not be able to approve NGABs. Some state ABs believe lab accreditation is an inherently governmental function and, in fact, one state has indicated they would be required to withdraw from the NELAP AC, if NGABs are allowed to participate. The NGABs have also indicated they cannot grant mutual recognition to labs accredited by NELAP ABs, as it would jeopardize their ILAC recognition.

The ABTF II sees the establishment of a separate approval and oversight body for NGABs as the best and only path forward at this time. The ABTF II believes a program for approval and oversight of NGABs could have the following characteristics:

- An approval body composed of members of the current NELAP AC, LASEC, NEFAP, and/or others.
- An Evaluation SOP similar to NELAP and NEFAP SOPs, which could be developed by the NELAP AC or others.
- NGABs judged competent to accredit labs to the TNI Standard will be designated "TNI Approved".
- States that can accept an NGAB accreditation may do so. Those who cannot are not required to do so.
- ♦ A forum for NGABs can be established to discuss consistency issues. Participation by the NELAP state ABs is voluntary.

At their September meeting, the TNI Board concurred and directed the ABTF II to continue their efforts to develop this approach. The Board and the ABTF II believe this approach is worth pursuing because it will provide some relief to states that perform out of state accreditations for labs that do not have a NELAP program in their state. For states that can accept an NGAB accreditation, there could be a reduction in out of state travel.

## **Standards Development Update**

By Ken Jackson, TNI

During the August 2012 Environmental Measurement Symposium in Washington, DC, four TNI Expert Committees presented standards under development. All of the committees had very productive interactive sessions that will result in further improvements to their standards.

The Quality Systems Expert Committee (QSEC) presented the comments received from the voting session on its Voting Draft Standard (VDS). In accordance with SOP 2-100 (Procedures Governing Standards Development), the Committee is now in the process of ruling those comments as persuasive or non-persuasive. Persuasive comments will result in further changes to the standard, which will subsequently be released for consideration.

Continued on next page



Update on Training Courses, Webinars and Webcasts (cont.)

## **UPCOMING WEBINARS:**

## Friday Brown Bag Series on Quality Systems

- Ethics Training for Laboratory and Field Professionals November 2, 2012
- Establishing a Data Integrity Plan
   December 7, 2012
- Roles of the Technical & Quality Manager in the Lab
   February 8, 2013
- Method Selection and Validation Topics March 1, 2012

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## WEBCASTS NOW AVAILABLE FOR VIEWING:

- Understanding and Implementing LOD and LOQ and their relationship to MDL and PQL
- The 2012 EPA Method Update Rule
- Corrective Action Process and Root Cause Analysis
- Internal Audits and Management Reviews

http://www.nelac-institute.org/edshome.php (Click on the On-Demand Training Tab.)



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## Standards Development Update (cont.)

Both volumes of the Field Activities Working Draft Standard (Volume 1 for Field Sampling and Measurement Organizations, and Volume 2 for Accreditors of Field Sampling and Measurement Organizations) were presented for discussion. Most of the comments received will be easily dealt with and result in minor changes to the standard. A few well-received comments on the Proficiency Testing part of the standard will require more extensive deliberation by the committee.

The Proficiency Test Expert Committee (PTEC) presented Working Draft Standards (WDS) for Module 1 of Volume 1 (the Laboratory Volume) and Module 2 of Volume 2 (the Accreditation Body Volume). Following an active discussion period at the conference, the committee has received many written comments. These are currently under consideration and those considered persuasive will result in changes to the draft standard. Also, the committee has almost completed a WDS for Volume 3 (General Requirements for Environmental Proficiency Test Providers) and Volume 4 (General Requirements for an Accreditor of Environmental Proficiency Test Providers). These will be published soon and will be discussed at the January 2013 Forum on Laboratory Accreditation in Denver.

A WDS incorporating a proposed modification to the calibration section of the Laboratory's Volume Module 4 (Chemistry) was discussed in the Environmental Measurement Methods Expert Committee (EMMEC) session. This committee (now re-named the Chemistry Expert Committee) has almost completed its improvements to the section as a result of the comments received. The committee has now started work on detection and quantitation, and specifically on editing the 40 CFR Part 136 Method Detection Limit (MDL) procedure (Appendix B). This is a result of a meeting with EPA staff, who agreed this would be the most promising approach for EPA to make changes to Appendix B without many years of more data gathering. To be successful, the committee must find ways to strengthen the MDL procedure without radical changes that would prevent the number still being called a MDL.

## **TNI Corrective Action Committee Report**

By Sharon, Mertens, Milwaukee Metropolitan Sewage District

Last August, the Board decided to undertake a formal corrective action process to review the development of the 2009 Standard, with the intent to suggest actions to improve this process for the current Standards being revised. Subsequently, an ad hoc task force was formed, led by Sharon Mertens (then Vice Chair of the TNI Board), with representatives from the NELAP AC, PT Committee, CSD-EC, LASEC, TNI Board, and TNI staff. This review was completed and a report was presented to the TNI Board at its September meeting. A complete copy of the report is available on the TNI website. This report presents the methodology, findings or discussion items, and recommendations of this committee.

The job of the task force was not to do a detailed review of each of the comments and/or concerns that came out of the 2009 Standard approval process, but rather to take a critical look at the process as a whole. The goal was simple – to document the issues and recommend process improvements. The committee used actual data from the process as well as anecdotal input. They examined the processes used by other organizations as well.

The following are the recommendations of the task force:

- The process from the time the expert committee receives comments on the Voting Draft Standard (VDS) to when the Standard becomes final should be modified.
  - Add an additional step to allow those who made comments to review how the committee used those comments to make changes;
  - Add a vote on the VDS by the membership after changes (based on comments) are made.
  - Form a Standards Review Council to review any Standards for policy, content, consistency, etc. at an organizational level.
- Examine the process used by the NELAP EC and LASC to review the Standard.
  - Add an earlier review to identify "show stopper" issues.
  - Explore better mechanisms to solicit input from the ABs (as customers) before and



Regulatory Update
By Jerry Parr, Catalyst
Information Resources

This article was prepared to provide TNI members information about events at the national level that may be of some interest. This information covers the period of March 9, 2012 through September 24, 2012.

## New Methods Approved for Drinking Water

EPA has approved ten methods for determining contaminant concentrations in samples collected under SDWA. Regulated parties required to sample and monitor may use either the methods already established in existing regulations or the alternative testing methods approved in this rule. The new methods include: EPA Methods 536, 523, 525,3, and 1623.1; Standards Method 3125 and 3112 B-09; and ASTM Methods D859, D1179, D5673, and D6239-09. http://www.gpo.gov/fdsys/ pkg/FR-2012-06-28/html/2012-15727.htm

## Standard Methods Publishes Policy on QC and Tables Related to the Method Update Rule

The Standard Methods organization has published a policy stating "Standard Methods supports only the most recent revision of its methods, including the required QC steps." The policy goes on to indicate that the QC sections in the 22nd edition of Standard Methods were extensively revised. Standard Methods also published two tables

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## TNI Corrective Action Committee Report (cont.)

during standards development to ensure that their needs are understood by the expert committees.

- Develop better mechanisms to track issues that are deferred to future rounds of standards development to be sure that all worthy recommendations are addressed.
  - Sometimes recommendations have merits but cannot be addressed in the current VDS.
     These are tabled by the committee, presumably to be addressed later. We should have a more formal way of tracking these.
- Review and update pertinent SOPs.
- Consider establishing a standardized review cycle for updates to the standard as ISO does.
   The suggestion would be every five years.

This report has been approved by the Board and has been given to the Consensus Standards Development Executive Committee, as well as the LASEC and NELAP AC for implementation in their respective processes.

The bottom line is that all of the committees, their members and others who were involved in the 2009 Standard tried to do a good job in following the procedures that were established. However, this was a process that was new to the organization. There may have been mistakes or inconsistencies and certainly things that could be done better in the future.

## **New Sample Preservation Rules for Volatile Compounds**

By Gary Ward, Oregon Environmental Laboratory Accreditation Program (ORELAP)

For several years, EPA guidance for sampling for Volatile Organic Analytes (VOAs) analyses has been to take two separate VOA samples, one acid-preserved for most VOA compounds and one unpreserved for a few compounds, such as vinyl chloride and styrene. This guidance has caused considerable problems for both laboratories and samplers.

At the National Environmental Monitoring Conference (NEMC) in Washington DC this summer, Troy Strock, US EPA Region 5 Laboratory, and Shen-Yi Yang, US EPA Office of Resource Conservation and Recovery, presented a paper showing that both vinyl chloride and styrene did not need to be analyzed in unpreserved samples, and in fact, recoveries were better in the acid-preserved samples.

In summary, as stated in Update V of SW846, laboratories do not need to take unpreserved samples for vinyl chloride and styrene. The study did not include the other unstable VOAs such as acrylamide, or 2-chloroethyl vinyl ether, however, so separate non-preserved sample is recommended for those compounds.

## **PFK-H Supply Shortage Resolved**

By Shen-Yi Yang, USEPA Office of Resource Conservation and Recovery (ORCR)

A networking session was held during the Environmental Measurement Symposium on August 7, 2012 to discuss the shortage of perfluorokerosene-high boiler (PFK-H) used for tuning and calibration of high resolution mass spectrometers for the analysis of PCBs and dioxin/furans by EPA Methods 23, 1613, 1668, and 8290. This calibrant is continuously bled into the EI Source for Lock Mass for every acquisition of standards and samples. Abundance of masses is critical for each function. For HRMS, the calibrant is not an one time deal, as a Low Resolution PFTBA (FC-43) calibration. This May, the Frontier Analytical Lab in California determined that PFK-H was out of stock and Alpha Aesar, the supplier, decided no longer to produce it. Several options were explored during this meeting and a new supplier has now been identified. This new supplier is:

## **Exfluor Research Corporation**

2350 Double Creek Dr. Round Rock, TX 78664 Phone: 1-512-310-9044 Sales: info@exfluor.com Website: http://www.exfluor.com



## Regulatory Update (cont.)

showing which methods are approved for wastewater and drinking water analyses and a memo from EPA approving methods from the 22nd edition.

http://www.standardmethods.org/

## New SW-846 Method for Toxaphene and Toxaphene Congeners by GC-NICI/MS

This method is used to measure the concentrations of various toxaphene congeners and technical toxaphene using negative ion chemical ionization mass spectrometry (NICI/MS). This approach emphasizes the analytical conditions recommended for technical toxaphene and for toxaphene congeners as compared to weathered toxaphene. <a href="http://www.epa.gov/epawaste/hazard/testmethods/pdfs/8276.pdf">http://www.epa.gov/epawaste/hazard/testmethods/pdfs/8276.pdf</a>

## **UCMR3** Finalized

The third Unregulated Contaminant Monitoring Rule (UCMR 3) will require monitoring for thirty contaminants from 2013-2015. EPA added hexavalent chromium to the list of unregulated contaminants to be monitored; removed secbutylbenzene and npropylbenzene; and moved monitoring of hormones from Assessment Monitoring to the Screening Survey. EPA will pay for the analysis of all samples from systems serving 10,000 or fewer people and will arrange for the collection of samples from the

Continued on next page

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## **NELAP Update**

By Lynn Bradley, TNI Staff

There are now ten completed Accreditation Body evaluations with renewed certificates in place. Four more are underway with the fifteenth and final one getting underway later in the year. There have been challenges filling the evaluation team rosters, and several state and federal individuals performed as many as three evaluations each. We're grateful that some were able to pick up the slack! You know who you are!

#### Status of AB Evaluations

| Completed         | Underway       | Pending       |
|-------------------|----------------|---------------|
| Florida DOH       | California DPH | Minnesota DOH |
| Kansas DHE        | Louisiana DEQ  |               |
| Louisiana DHH     | Oregon DOH     |               |
| New Hampshire DES | Illinois EPA   |               |
| New Jersey DEP    |                |               |
| New York DOH      |                |               |
| Pennsylvania DEP  |                |               |
| Texas CEQ         |                |               |
| Utah DOH          |                |               |
| Virginia DCLS     |                |               |

On the NELAP web pages, you'll notice that the listing of Accreditation Bodies now includes specific contact information for filing complaints, an adaptation made in response to conversations with ACIL representatives earlier this year.

The AC approved for implementation the Temporary Interim Amendment (TIA) proposed by the Proficiency Testing (PT) Expert Committee, about Whole Effluent Toxicity Testing (WETT) PTs that was effective August 1, 2012. Laboratories can expect communication from your primary AB concerning this change.

You will also notice that some new interpretations of standards from the SIR process are posted to the TNI website. More will follow as the Accreditation Council (AC) makes a concerted effort to either approve or return for clarification the backlogged requests. The Laboratory Accreditation Systems Executive Committee (LASEC) is working to improve the process so that only clear and concise interpretations are offered to the NELAP ABs to approve for "implementability" purposes.

The LASEC will also be coordinating with the Consensus Standards Development Executive Committee to update processes and procedures for reviewing new standards prior to adoption, in line with the recommendations from the Board-appointed Corrective Action Workgroup. Coordination and communication earlier in the process should help avoid some of the challenges experienced in implementing the most recent standard.

The LASEC has nearly half its members approaching the end of their maximum service on the committee (two consecutive three-year terms, per TNI SOP 1-101). If you believe this would be a good place for you to contribute to the future of NELAP, please fill out the Committee Member application on the TNI Programs/Committees page (<a href="http://www.nelac-institute.org/comm-app.php">http://www.nelac-institute.org/comm-app.php</a>) and check LASEC under "Program Committees" or contact staff or the committee chair, Kirstin Daigle, through the committee page on the website.

The changeover to the new Standard continues in progress. The table on the next page shows the latest status.



## Regulatory Update (cont.)

systems that participate in the Pre-Screen Testing. Additionally, EPA coordinates a Laboratory Approval Program for the contaminants. UCMR 3 requires laboratories have EPA approval to analyze samples. http://www.gpo.gov/fdsys/pkg/FR-2012-05-02/pdf/2012-9978.pdf

## EPA Publishes Method 1200 for Salmonella in Water

EPA has published a method for the identification, confirmation, and quantitation of non-typhoidal Salmonella in drinking water and surface water samples, using selective and non-selective media followed by biochemical and serological confirmation. <a href="http://water.epa.gov/infrastructure/watersecurity/wla/upload/epa817r12004.pdf">http://water.epa.gov/infrastructure/watersecurity/wla/upload/epa817r12004.pdf</a>

## NEMI Adds Statistical and Assessment Methods

The National Environmental Monitoring Index has added statistical and assessment methods information that "MAY be useful." Examples of these methods include Rapid Bioassessment Protocols for Use in Wadeable Streams and Rivers and Nondetects and Data Analysis: Statistics for Censored Environmental Data. While some of these methods are available online, other are summarized and would require purchase of a book. Click here or go to https:// www.nemi.gov and click on the Beta tab.



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## **NELAP Update (cont.)**

## Implementation Status of NELAP ABs, Transition to the 2009 TNI Standard

| AB        | In Effect Now              | Status/Progress                                                                                                                                                                                                                                                                                                                                                               |
|-----------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CA        | 2003 NELAC                 | Presently using the 2003 Standard; will shift to 2009 Standard as staff can be trained and the checklist approved.                                                                                                                                                                                                                                                            |
| FL        | 2003 NELAC                 | Not penalizing labs that choose to implement 2009 TNI. May have rule in place by July 2013, or wait for next version of Standard. Accepting PT reports per 2009 TNI Standard.                                                                                                                                                                                                 |
| IL        | 2003 NELAC                 | Will incorporate by reference into regulations the next TNI Standard by reference when it is adopted by the NELAP AC (a 2012 revision is expected).                                                                                                                                                                                                                           |
| KS        | 2003 NELAC                 | Moving forward slowly.                                                                                                                                                                                                                                                                                                                                                        |
| LA<br>DEQ | 2003 NELAC                 | Not penalizing labs that choose to implement 2009 Standard. Labs seeking national accreditation will be cited for non-compliance with the common requirements of the Louisiana Administrative Code, 2003 NELAC Standard and 2009 TNI Standard. Anticipating public comment period this fall on regulation update, which includes provision for adoption of the 2009 Standard. |
| LA<br>DHH | 2003 NELAC                 | Moving to 2009 Standard, likely by 2013. Regulation is written and approval expected by December 2012.                                                                                                                                                                                                                                                                        |
| MN        | 2003 NELAC                 | Not penalizing labs that choose to implement 2009 TNI. May skip 2009 TNI Standard if standards development continues expected pace.                                                                                                                                                                                                                                           |
| NH        | 2003 NELAC                 | Not penalizing labs that choose to implement 2009 TNI. Rulemaking expected to begin mid-2013.                                                                                                                                                                                                                                                                                 |
| NJ        | Assessing to 2009 Standard | Previously written rule is now being processed. Should take a few months to reach "proposal" stage, and then an additional 6 months to become final.                                                                                                                                                                                                                          |
| NY        | 2003 NELAC                 | Will incorporate by reference into regulations the next TNI Standard by reference when it is adopted by the NELAP AC (a 2012 revision is expected).                                                                                                                                                                                                                           |
| OR        | 2009 TNI                   | Transition effective October 1, 2011.                                                                                                                                                                                                                                                                                                                                         |
| PA        | 2009 TNI                   | Began assessing labs to new Standard in October 2011; official transition date was July 2011, but needed to get checklists in place, etc.                                                                                                                                                                                                                                     |
| TX        | 2009 TNI                   | Transition effective July 2011.                                                                                                                                                                                                                                                                                                                                               |
| UT        | 2009 TNI                   | Completed transition in Fall 2011.                                                                                                                                                                                                                                                                                                                                            |
| VA        | 2003 NELAC                 | Regulation development begun. Where the Standards differ, gives lab "benefit of doubt."                                                                                                                                                                                                                                                                                       |

## Cryptosporidium Laboratory Approval Program

By Carrie Miller, USEPA

The EPA Office of Ground Water and Drinking Water's Technical Support Center (TSC) is to integrate *Cryptosporidium* laboratory approval into existing State and EPA Regional Certification/ Accreditation programs. EPA *Cryptosporidium* laboratory approval granted by TSC applied to the first round of the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) monitoring. Approval does not carry over to the second round of LT2ESWTR *Cryptosporidium* monitoring that begins in 2015. State oversight of *Cryptosporidium* laboratories is provided for in the LT2 rule and is consistent with the approach to oversight of laboratories for all other regulated analytes. TSC anticipates that EPA Regions will identify appropriate and equivalent State programs to oversee laboratories that wish to support Round 2 monitoring. TSC will continue to provide technical assistance to States, EPA Regions and laboratories during this integration. As in 2010 and 2011, TSC will continue to provide the *Cryptosporidium* Certification Officer Training Course to further prepare.

State and Regional personnel to certify/accredit LT2ESWTR *Cryptosporidium* laboratories. Laboratories wishing to support the LT2ESWTR *Cryptosporidium* monitoring program during the second round will need to:

- Send your request and laboratory contact information to the appropriate EPA Regional personnel based on your laboratory location;
- ♦ Continue to successfully participate in two *Cryptosporidium* Proficiency Testing events per year for each approved method for which the laboratory seeks certification/accreditation.



# Formation of Two New Expert Committees

A reorganization of responsibilities for the Environmental Sector Quality Systems Standard has resulted in the formation of two additional expert committees.

The Microbiology and Radiochemistry Expert Committees will be responsible for Modules 5 and 6, respectively, of Volume 1: Management and Technical Requirements for laboratories Performing Environmental Analysis.

Those wishing to apply to be Committee Members are invited to download and complete a committee application.



## TNI MISSION

The NELAC Institute is a 501(c) 3 non-profit organization whose mission is to foster the generation of environmental data of known and documented quality through an open, inclusive, and transparent process that is responsive to the needs of the community.

## VISION

All entities generating environmental data in the United States will be accredited to consensus national standards.



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